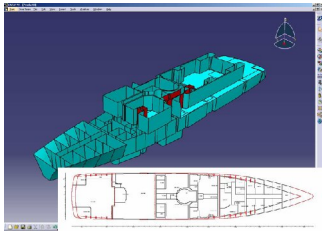
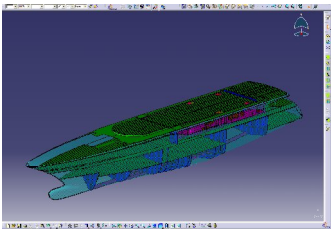




## YP4-1 Yacht General Design option systems & layout



*From 3D Compartments to  
General Arrangement Drawing*



*Primary Structure for a  
Top-Down design automation*

**Target:** Naval Architects, Marine Engineering offices and Shipyard's design office performing multidisciplinary design of large yachts and ships with metallic structures.

**Process coverage:** from an existing hull form and superstructure –that can also be designed with the package- the designer will prepare the Geometrical Reference Mockup becoming the reference for all the disciplines all along the project life. Based on this reference the real design of primary (functional) structure, main systems space reservation and accommodation volumes will be done in parallel to coordinate the space and fix most of the critical problems.

The designer will generate from this 3D design the classification drawings including primary structure drawings, body plan, General Arrangement drawing, capacities drawing ...A lot of reports can also be extracted from the Digital Mockup for preliminary costs estimates or procurement.

This package is based on the **YM2** configuration with the following additional modules:

**SFD: Structure Functional Design** to quickly model the primary structure necessary for weight estimates, bloc split, classification drawings, FEA calculations and space coordination

**SSR: Systems Space Reservation** to place reservations for main equipments and easily routing pathways for the main systems on board. It can make possible to snap on the GA drawing in background, very useful at this stage.

**SRT: Systems Routing** is a multidisciplinary routing tool for piping, HVAC and cable trays that can automatically place individual pipes inside SSR pathways and allows to place and connect physical components like pumps, valves...

**CNA: Compartment and Access** to create the main volumes inside the ship for the space allocation and identification of the rooms, tanks and compartments. This is providing all necessary informations to generate automatically the General Arrangement drawing.

The **YM2** configuration named '**Styld Mechanical Design**' offers the main tools of CATIAV5 to perform solid modeling, free form surface modeling, parametric surface modeling, healing assistant to provide advanced surface repairing tools, assembly design, automatic drawings generation as well as manual drawings and of course the neutral formats translators (iges, step, dxf, dwg)